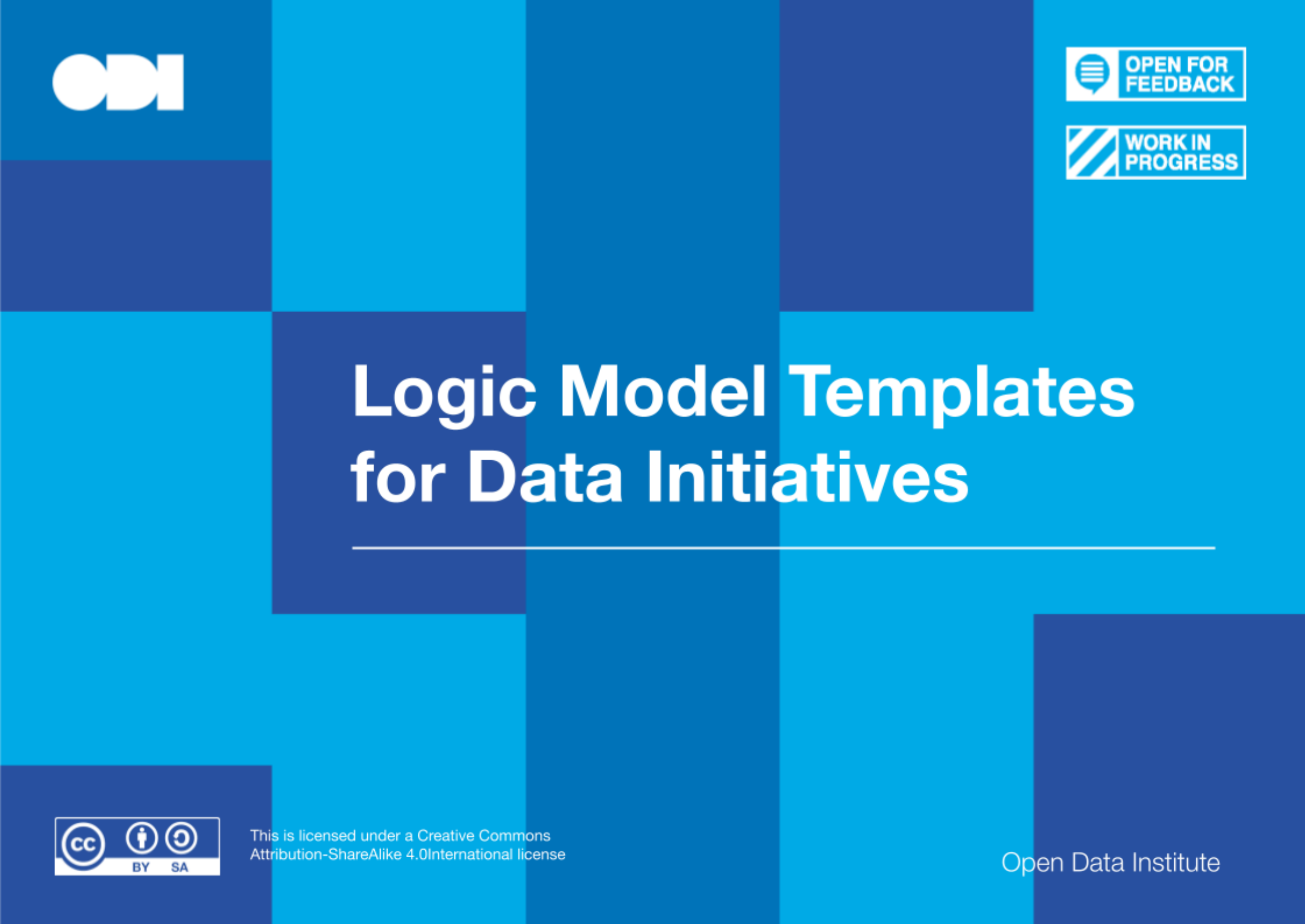
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Logic Model Templates for Data Initiatives
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Open Data Institute

About the Logic Model Templates for Data Initiatives

Welcome to the Logic Model Templates for Data Initiatives, which forms part of the ODI Data Landscape Playbook. Logic models are tools designed to help people plan impactful projects and communicate those plans to others. They provide a structured way of thinking about how to build a programme to address a specific problem or challenge, which is important for designing a good data access initiative.

Data access initiatives are initiatives or programmes that have a clear challenge, involve multiple stakeholders and have a strong focus on collecting, using and sharing data to achieve their goals. Many data access initiatives undertake common challenges to build or improve data infrastructure, such as adopting standards, creating challenge prizes and developing data publishing initiatives. This tool was designed for large initiatives but can help with any data project.

Our research shows that filling out logic models for new initiatives can be difficult. Working through this logic model template will help you to maintain your focus on the impact you're trying to achieve, whilst making sure you cover all of the necessary steps to build or improve the data infrastructure you need to achieve impact. To help you to fill out a logic model, we have created prompts, and three example logic models from data access initiatives working on common challenges. This tool can be used as a way to plan a strategy to move from inputs to impact, to help to communicate how you will achieve that change, or to help build consensus on how to create impact across your organisation or sector. For more help with logic models, check out this guide by the NHS.

These logic model templates are still in beta form, meaning that we're hoping we'll be able to improve and update it in the coming years. We'd love to hear about your experience using it – what was the context, what worked, what didn't, is there anything missing? Please forward all written feedback to research@theodi.org.

Contents:

- About the Logic Model Templates for Data Initiatives
- How to use the templates
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- What next?
- A blank logic model template with prompts
- Three example logic models of common activities undertaken by data initiatives:
  - Open standards for data
  - Data challenge prize
  - Data publishing initiative

This is work in progress. It is likely to be updated as we continue our work. Keep an eye out for updates!

How can it be improved? We welcome suggestions from the community, please send all feedback to research@theodi.org.

How to use the templates

Download or make a copy of this document to use collaboratively with your team.

Impact to input

Working backwards from impact ensures that you plan your inputs and activities to specifically address the problem that you are trying to solve by building or improving data infrastructure.

Fill in each column one by one, asking yourself what must be done to achieve the previous step.

For example, once you identify the expected impact, it is helpful to think about what needs to happen to make it a reality, ie what are potential solutions/ways to address the problem? This will help you define the broad effects of your work (outcomes), the outputs, activities and participants needed to make these effects happen, and the inputs needed to kick the initiative off.

Spend time discussing each section as a team, making sure to listen to each and every member. Use the prompts and example logic models as inspiration.

Input to impact

Once you have worked through each column, work back the other way from input to impact to check the consistency of the logic for each column. Think about what is achievable given the inputs available.

To complete the logic model templates, you may want to type up a formal version to share with the wider team, and to have ready to share with future partners and funders.

Who is in the room?

- 2+ people from across your team, with one acting as a facilitator.
- This can also work as a solo thought exercise, followed by a critical review by project partners and/or other stakeholders.

How long should you spend on this exercise?

- **Short version:** work through the logic model quickly (20mins), before returning to the model at a later date for a longer review as a team.

- **Long version:** spend one to two hours working through the logic model, taking time to properly think through and discuss each step.

Glossary of terms

Situation

The originating problem, or issue, set within a system of socio-political, environmental and economic circumstances, that you are seeking to address by building or improving data infrastructure. The situation is the beginning point of logic model development.

Input

What we invest – the resources that are necessary for an initiative to carry out its planned work, such as funding, access to existing datasets, support from partners, or use of specific platforms and technologies.

Outputs

Activities: The specific tasks or actions undertaken which will produce an outcome. These activities will produce outputs, meaning the tools, knowledge, products or services to affect change. As activities and outputs are often strongly linked, we have combined them in one column. We suggest highlighting or **bolding** the output created by each activity you list.

Your activities should aim to build capability, create opportunities, or inspire motivation for your stakeholders.

Participation: Who must be involved, reached, targeted, and/or a participant for the outcomes to be achieved, and how you will engage with these stakeholders.

Outcomes

The expected results of the initiative, and the preconditions for impact. They are often expressed in terms of changes in knowledge, attitudes or the practices of your organisation, your stakeholders or your community. They are often measured through either quantitative or qualitative information.

Impact

The socio-political, environmental and economic consequences of the initiative. How will your data access initiative, and the data infrastructure you will build or improve, make a difference to the situation described above?

What next?

For more information about the next steps below, please check out Play five: Planning for impact when designing your data initiative in the Data Landscape Playbook.

Identify the assumptions, external factors and ignored consequences which can impact your initiative

- Assumptions are your underlying beliefs about how your programme will work. Inaccurate or overlooked assumptions can impact how the success of your initiative is viewed. To understand your own assumptions, tap into your own experience, local wisdom, research, or best practice. We are often unaware of our own assumptions, which is why we emphasise the benefit of having external people review your logic model, to challenge internal assumptions you may not notice.
- External factors are the conditions in the environment within which the programme exists, and over which you have little control, but which can influence the initiative's success. Take time to consider these factors so you can do whatever you can to mitigate against any negative outcomes they may bring.
- Many evaluations and logic models only focus on intended outcomes and impacts – but unwanted or ignored results are important to consider as well. 'Consequence Scanning' is a tool that provides you with the opportunity to focus on the positive aspects of your initiative and mitigate against or address potential harms before they happen.

Sketch your evaluation framework

- As you develop your logic model, identify what your measures of success are. These metrics will help you monitor the initiative and communicate the outcomes to the broader ecosystem. It is helpful to define indicators at all the different levels of your theory of change. Think about:
    - identifying a set of measures that will be used to establish the success of the programme
    - establishing targets which define success

Logic Model Template with prompts:

Situation: Your text goes here

Inputs	Outputs	Outcomes	Impact
• Your text here	**Activities** (with outputs in **bold**): • Your text here **Participation:** • Your text here	• Your text here	• Your text here
Think about: • What evidence do we have to support this initiative? • How will the initiative be financed? • What connections can you use to help implement the initiative? • What skills and capabilities do you need? • What data infrastructure is available?	***Think about:*** **Activities:** The following is a list of common activities you might undertake and subsequent outputs when strengthening data infrastructure: • Creating or improving **data assets** (such as datasets, identifiers and registers) • Building or driving the adoption of **standards** and **technologies** used to curate and provide access to data assets • Developing and driving the adoption of **guidance** and **policies** that inform the use and management of data assets and the data infrastructure • Establishing and increasing the capability of **organisations** that steward or govern data infrastructure through **training, guidance** and **tools** • Convening, equipping and empowering **communities** involved in contributing or maintaining data infrastructure, and those who are impacted by decisions that are made using it	***Think about:*** • How will any new or improved data infrastructure change behaviours or attitudes? • How will any new or improved data infrastructure change practices? • What changes in knowledge will any new or improved infrastructure influence? • How will the products and processes you create make it easier to achieve the desired outcome? • How might other organisations be enabled to build data infrastructure or improve data flows? • How might new sources of revenue or funding be unlocked? • What other 'value flows' might be enabled, such as increased trust, transparency or fairness? It can be helpful to think about outcomes in the short, medium and long term. Try to rearrange the outcomes you've identified into short, medium and long term to better understand how they are connected.	***Think about:*** • What impact is the initiative trying to achieve? • What would improved access to data change? • Who will benefit from the initiative and how?

- Creating **evidence** and **case studies** that motivate both internal and external stakeholders to buy into the project

Participation:

- How will different stakeholders help you to build or improve data infrastructure?
- Who are the principal holders and users of data? Who is the data about?
- Who is involved in supporting the data access initiative? Eg partners, funders and technical or domain experts.
- Who will use the outputs of the initiative?
- Who will be affected by your initiative? Who is this initiative seeking to help?

Example logic model for adopting a new open standard for OpenActive:

Situation: OpenActive (OA) wants to adopt a new standard for data about sport and exercise classes in the UK to increase public activity

Inputs

- Funding from Sport England
- Existing research and evidence
- Connections between partners and stakeholders in the sport industry and the expertise at the ODI

Outputs

Activities:

- User and desk **research**
- Survey the data landscape (inc **ecosystem mapping** & **gap analysis**)
- Develop **use cases**
- Engage and align stakeholders (internal and external) including **training**
- Technical development of the **four OA standards, open source software and tooling** to support data publishing
- Develop a **roadmap** for the future including theory of change, and sustainability plans

Participation:

- Data stewards (gyms, sports teams etc)
- Data users (app developers etc)
- End users (public)
- Policymakers and regulators
- Decision makers (Sport England)
- People impacted by use of data
- Funders and sponsors (Sport England)

Outcomes

Short term:

- Data publishers see the value in adopting a standard
- The coalition of partners are aligned around, and committed to, a common vision, roadmap and KPIs for the future
- First set of standards are released with accompanying user guides (activity standards)

Medium term:

- More, and better quality, data is shared by activity providers
- More people use the service to find sports and activities
- Second set of standards is released with accompanying guides (booking standards)
- Organisations outside the ecosystem show interest in developing new products

Long term:

- People are making bookings thanks to the booking standard
- Strong alignment and commitment across the actors in the sports ecosystem
- A sustainable business model is implemented ensuring future stability of the standard
- New apps and services are developed utilising data under the OA standard
- OpenActive is standard practice for the sports and physical activity sector beyond March 2021

Impact

- The UK public is more active, more people are playing sports and doing activities

Example logic model for a challenge prize to reduce snakebite mortality in India:

Situation: The snakebite project aims to reduce mortality and morbidity from snakebites in India through a challenge prize to reward innovative solutions to the problem

Inputs

- Funding from charities
- Existing research and evidence
- Connections with partners and stakeholders in India and the snakebite research community

Outputs

Activities:

- Build multidisciplinary **partnerships** with universities, NGOs, other relevant institutions
- Design and promote the challenge and engage with challenge participants
- Judge entries and **award prizes**
- Provide mentoring and **training**
- Provide **sustainability support** for prizewinners
- Strengthen **the community** of data scientists working on the challenge (and beyond) through peer network support

Participation:

- End user groups (patients/ clinicians/ healthcare providers/ researchers/ citizens)
- Funders
- Partners (universities, NGOs, other relevant institutions)
- Data Scientists (tech community)
- Health community

Outcomes

Short term:

- Snakebite data innovation minimum viable products are developed that draw insights on the risk of snakebite mortality and morbidity in order to develop products and tools that improve:
- Resource management for hospitals and other healthcare providers
- Planning and implementing snakebite prevention activities by NGOs and other stakeholders
- Long-term planning for snakebite management and responses by health policymakers

Medium term:

- Clear plans and/or partnerships are established to implement and/or sustain snakebite data innovations beyond the duration of the award
- Networks/ relationships across tech, academia, healthcare are established or reinforced to improve the preparation and response to snakebite instances in a sustainable manner

Long term:

- Products and tools created during the challenge are used to inform decision makers about prioritising preventative activities and resourcing the health system for snakebite response
- New organisations are created to tackle snakebite mortality

Impact

- Snakebite mortality and morbidity is reduced in India

Example logic model for building a data publishing initiative with the Platform for Operational Data (POD):

Situation: Offshore Renewable Energy Catapult (ORE Catapult) wants to improve sector efficiency by stewarding operational data to support research, projects and product development

Inputs

- Turbine operational data from Levenmouth Demonstration Turbine and Equinor's Hywind Scotland Pilot Park a floating offshore wind farm
- Performance data from ORE Catapult community commercial partners
- Resources to package the data
- Resources from InnovateUK and BEIS as part of wider ORE Catapult support

Outputs

Activities:

- Technical development (inc data management, website development, etc)
- Development of appropriate **commercial membership models for data access**
- Research how to improve the service offering to providers such as **cost modelling** for wind farms and developer sandboxes
- Engagement with supply chain to develop **commercial datapacks** for specific challenges and use cases
- **Map** the data ecosystem and conduct a **gap analysis**
- Engage stakeholders (internal and external)
- Develop a **roadmap** for the future including a theory of change, and sustainability plans

Participation:

- Academic researchers
- SMEs
- Funders - BEIS & InnovateUK
- ORE Catapult Community
- Developers
- Turbine operators
- Third parties (consultancy firms, technology firms, data scientists)

Outcomes

Short term:

- Build relationships with other wind turbine companies
- Build the POD website and 'Data Catalogue' to act as the front door to the data
- Develop a funding model to reach sustainability in the long term
- Develop wind farm cost models

Medium term:

- Publish key datasets including: turbine operations and operator performance and share for free/fee via an emailed csv
- Build products to improve operators services, such as developer sandboxes
- Build an internal digital twin approach
- Turbine fatigue life is analysed and better understood

Long term:

- Improve the operations of various offshore renewable energy providers
- Develop a digital twin approach as a product for wind turbines
- Support development of innovative products that support improvement in turbine performance and life
- Organisations share more data about their wind turbines

Impact

- Increased amount of renewable energy being used in society relative to fossil fuels /nonrenewable energy
- More UK representation within global offshore wind supply chain
- Reduced levelised cost of energy of offshore wind